DOCUMENT RESUME

ED 309 432 CS 211 984

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TITLE Creative Computer Detective: The Basics of Teaching Desktop Publishing.
PUB DATE Aug 89
NOTE 12p.; Paper presented at the Annual Meeting of the Association for Education in Journalism and Mass Communication (72nd, Washington, DC, August 10-13, 1989).
PUB TYPE Speeches/Conference Papers (150) -- Guides - Non-Classroom Use (055) -- Viewpoints (120)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Computer Assisted Instruction; Computer Oriented Programs; Computer Software; *Desktop Publishing; Higher Education; *Journalism; Layout (Publications); Mass Media; Teaching Methods; Technological Advancement
IDENTIFIERS Computer Anxiety; Computer Assisted Design; *Computer Assisted Publishing; Journalism Computer Assisted Instruction

ABSTRACT

Teaching desktop publishing (dtp) in college journalism classes is most effective when the instructor integrates into specific courses four types of software--a word processor, a draw program, a paint program and a layout program. In a course on design and layout, the instructor can demonstrate with the computer how good design can be created and imitated by using the first page of "Moby Dick," illustrated by Barry Moser. The Moser design works well because there are basically four elements: the chapter heading, the wave graphic, the initial letter and the text. The students are then assigned to recreate this page and later to create their own two-page layout or newsletter. Along with the new techniques and opportunities, instructors must also address the current concerns about computers regarding plagiarism, jobs after college in which computers are not used, and changes in the traditional chain of command in journalism. (Seventeen references and the Moser design are attached.) (KEH)

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Creative Computer Detective: The Basics of Teaching Desktop Publishing

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The advent of desktop publishing has brought many changes to the way publications are produced. A complete page layout can be prepared on a computer about the size of two shoe boxes and then a camera-ready copy can be quickly created using a laser printer. One of the results of this revolution is that journalism instructors are discovering that they must teach how to use computers in many courses, including magazine management and related classes. Computers in the classroom can be tremendously useful as they provide the ability to handle copy and layouts in an easy, efficient manner; but they are also rather daunting to faculty members who now find the complicated technology in courses hitherto devoted to writing and perhaps design.

Desktop publishing systems are tools which reach beyond the advanced word processing equipment, such as Atex, that newspapers and some magazines have been using for several years; these computers are changing the entire approach to producing any publication. The lines between writer and editor and designer are blurring. Entire chains of command are being overhauled. Publications are creating slick, complicated graphics on computers, integrating them with the text and are beginning to do pre-press work, such as color separations, all on one system. Effects of desktop publishing are somewhat different on newspapers than on magazines with their emphasis on design and with longer deadlines and often smaller staffs.[1] "The Mac has revolutionized *(Business Week's)* graphics department. Pre-press production used to cost about $3,000 per piece. Now it's $300," Laura Baer, deputy art directory at *Business Week* told *MacWeek* this spring.[2] Some magazines are being written and created entirely with the Macintosh computer, including the recently launched *Smart*.

This paper will discuss some basic techniques for introducing desktop publishing (dtp) technology into college-level journalism courses. Instructors will find the similarities in the programs to familiar journalism traditions reassuring. Some guides to beginning to use dtp in the classroom are provided as well as two projects which have proved successful. The impact of desktop publishing has also brought new dimensions of plagiarism and new job responsibilities and opportunities at all levels of a publication.

Creating a Desktop Publishing Lab

Desktop publishing requires, quite simply, access to computers. (But students may complain, however, access is not always that simple.) When putting computers intended for

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desktop publishing in a classroom or lab, journalism departments need to consider acquiring those systems which are the easiest to learn and use and those which are best suited to the advanced layout programs.

The best machines have programs which are "user friendly." This computer jargon phrase means that the programs are designed to work the way people think. No program is perfect; all are quirky and reflect a software writer's style. But the best allow for users to make mistakes, provide a variety of options to do the same steps, incorporate memorable commands, mimic the way projects have traditionally been handled, and allow for creativity. All computers take time to learn, but the best systems are designed to build on knowledge so a user does not have to relearn new commands when entering every new program.

Also, computers for desktop publishing must be suited for the rather advanced process of combining words and graphics into a page layout. Such programs are best when they are graphics-oriented and allow for experimentation. They need to easily use many tools (such as fonts, rulers, cropping tools) and designs as well as quickly access and change text. Then they work best when they are well coordinated with a laserprinter to create camera-ready copy. Desktop publishing programs usually require substantial memory so a hard disk storage is essential as well.

Computers that best fit these requirements are the Macintosh (and perhaps the NeXT machines). Although IBM PC's and compatibles and mainframe computers are great for handling calculations and words, they were not specifically designed for the current graphic demands. However, IBM personal computers and their compatibles can be configured for desktop publishing. Such configurations require substantial memory, awkward commands, and still do not provide the graphic versatility of a Macintosh system. If students learn on a program that is available on either hardware, such as PageMaker from Aldus, then they will be able to crossover, either way, if necessary. Both Macintosh and PC systems have their pluses and minuses; it is not the goal of this paper to review all their aspects, but simply to point out the need in considering how the computers will be used to teach and handle desktop publishing.

A classroom for the desktop publishing sessions may have enough computers for every student to work individually on their own machine. Some advanced students may venture into other programs during the demonstration which become particularly distracting to struggling beginners who cannot fathom what their neighbor is doing. Instructors should insist that each student follow at the same pace. Explaining software may work the best by having students watch the instructor first, and then following up on their own later. Demonstrating software is difficult to do simply with a chalk board or with overheads, although overheads are better than just a chalkboard. Steps occur so rapidly that the best desktop publishing demonstrations are conducted with a special adaptor which is attached to the computer and then placed on top of an overhead. With this device, an instructor's computer screen can constantly be projected up on a

classroom wall screen so that all students can easily watch. Students probably will not learn desktop publishing without sufficient daily practice. The assignments that have worked best in this writer's magazine production classes, desktop publishing course, and Macintosh workshops are those that demand that students tackle assignments in a short time frame. Stretching out assignments (particularly early ones) beyond a few days or a week will not force students to work on the computers for a significant amount of time each day.

Consequently, it is important for journalism departments to be certain that their students have regular access to computers beyond the classroom setting. This may mean a department has its own computer lab (which many are establishing) or making certain that journalism students have sufficient access to university-wide labs with appropriate computers. Either way, instructors and students should also realistically assume that people monitoring computer labs will not always be teaching how to use the computers; the attendants typically have too many people and computers so they cannot provide individual attention.

Structuring an introduction to desktop publishing

Teaching desktop publishing tools seems to be the most effective if integrated into a course. Desktop publishing can be taught in several different ways. It can be cursorily explained in a half-day workshop, it can be explained but not experimented with in a full day workshop, it can be taught as an intensive week-long class, or it can be integrated into a course such as Magazine Production or Management, Public Relations Techniques, Advertising Copy and Layout, and Advanced Editing and Design. The dtp programs work best when they are directly applied to course work, rather than seen as only tools. Even when not integrated into a course, it is easy to use realistic or actual projects rather than require a great deal of theoretical work. During a week-long desktop publishing course many university and media professionals in the class brought in projects for all the students to work on; class members acted as account executives and explained the demands of their project. Desktop publishing is particularly suited to a Magazine Production course in which the class produces an actual magazine; this is an opportunity to not only learn about desktop publishing within a magazine context, but to create a handsome and relatively inexpensively produced publication. Costs for typesetting and layout are essentially reduced to the cost of the equipment and software (which can be depreciated over several semesters) and then supplies, such as special laser paper, disks and laserprinter toner. There is still, however, the bill to the printer. Journalism departments that once balked at the expense of creating magazines in such courses may now want to rethink their reluctance as desktop publishing shrinks the budget; students may even be willing to pay some sort of lab fee for inexpensive copying or printing.

Teaching desktop publishing in a course includes essentially four types of software — a word processor, a draw program, a paint program and a layout program. I have taught dtp by

explaining only a word processing software and then jumping into a compatible layout program and have also taught it be spending time on a draw program (which is object-oriented) and a paint program (which is bit-mapped). The class that was most successful in quickly learning the advanced layout program (PageMaker v3.0 by Aldus) learned both the text and visual programs first. The earlier classes had some difficulties understanding the mechanics of the draw aspects of PageMaker. Also, the students had less opportunity for creative experimenting since learning just the word processor (Microsoft Word v. 3.01) tends to be rather straightforward; the draw and paint programs encourage wild designs that can later be tamed into realistic graphic solutions. The students who learned the draw and paint programs also had the ability to generate complicated designs which they incorporated into the layouts; their layouts tended to be more imaginative. The problem with teaching so many programs before the layout software is it sends Magazine Production-type course off-track for awhile. Incorporating the many different programs works better in just a desktop publishing class.

When introducing students to desktop publishing, it is critical to introduce good design as well. The ability to create clean, effective designs need to be stressed as there is a temptation by all beginners to make messy, kitsch designs with computers because they are so easy to do; the temptation toward type that is **bold**, **underlined**, outlined, and shadowed is great. In fact, students who have had design experience before learning desktop publishing tend to do better than those who are introduced to both areas at the same time.

Students should be aware of desktop publishing's strengths and limitations as David Hewson points out in *Introduction to Desktop Publishing*: "The successful introduction of dtp depends upon a combination of factors, many of them human, not computer ones. Dtp technology is becoming more sophisticated by the month — *but it does not create for you skills which you do not have.*" (emphasis Hewson's).[3]

Detective Work

When students are following every step of a software program, they will still make mistakes. Often this may pul down the wrong window or type in a slightly different code (i.e., \ instead of /). Or it could be much worse. It is as this point that students and instructor embark on Sherlock Holmes-style deduction; they must figure out what was the proper code and what went wrong.

When errors occur, an instructor must work backward, in a detective fashion, to deduce what steps the student made already. Often, to get out of an error, it is easiest to retrace the steps backward. Sometimes a student's behave incongruently. At these times, instructors who have made many errors, intentionally or not, can use their experience to figure out what happened. This will not always be easy and sometimes it is exasperating to be teaching a computer session and have a machine become quirky. However, it is important for students to see that there is

some form of recovery, even if it does mean turning the machine off and starting again. Because of such mistakes, students should learn to regularly save their work and they should be encouraged to work with programs that have at least a one step revert. Also, it is imperative that the instructor has made an effort beforehand to open up every window possible, follow as many key commands, and made as many simple types of foreseeable mistakes and then figured out how to correct them.

Most students are sophisticated enough to know that there are right and wrong ways to do things with computers. However, some are also fearful of computers for this reason because they are worried about doing something incorrect. They worry about losing their entire document, about ruining their disk, about breaking the school's computer. Consequently, students may be initially reluctant to become involved in desktop publishing because it is sophisticated and because they fear failure, or in computerese: a crash. This seems to be a problem particularly for older and returning students who may require special encouragement. Also, overcoming initial computer difficulties sometimes is a problem for smart students who are not accustomed to failing; working with computers demands that one fail, work through problems and then succeed.

Two Suggested Design Assignments

Moby Dick and The Wave

When initially demonstrating a page layout program, students appreciate seeing an actual document created, rather than seeing unrelated text and graphics scattered on a page. The instructor also can demonstrate this way how good design can be created, and imitated, even by beginners. In introducing *Graphic Design for the Electronic Age*, Jan White notes how terrifying graphics can be to beginners and how they, like everyone else, needs to follow the solid basics. "Today's ever-changing electronic technology with its miraculous speed, accuracy, and flexibility, as well as its apparently limitless typographic options, can be daunting. Daunting? Terrifying, that is, to anyone but the technician or expert. That's why we must go back to the basics, because the wonders of technology are nothing more than tools for us to use for the same old purpose of human communication." [4]

An effective, simple design to recreate is the first page from the first chapter of *Moby Dick*, which was illustrated by Barry Moser for The Arion Press (see attachment) and later re-printed by the University of California Press.[5] However, no matter what design is chosen for an introductory session it should be as uncluttered and as straightforward as possible. The Moser design works well because there are basically four elements: the chapter heading, the wave graphic, the initial letter and the text. The entire design is particularly effective, as it establishes the main theme of the book through the strong, powerful, violent wave, which reinforces the initial letter C which begins the famous first line.

Before demonstrating the design, an instructor should have typed the body text in a word processor and scanned the wave. (This project assumes that students are familiar with a word processor, paint and draw programs.) If a scanner is not available (although satisfactory, hand-held ones are available for less than $200), another design can be prepared which uses computer clip art. It is important to use some type of graphic to show the combination of text and graphics. The chapter head may be prepared during the demonstration.

When showing how to use the page layout program, an instructor will probably first cover basics such as opening new files, establishing margins, using rulers and whatever grid or guidelines that are available. The next step is creating the chapter head, which will involve typing directly onto the page; This step is in contrast to placing a document already created, which can be the next step. With all the text on the page, the instructor can show how to work with type sizes, styles, faces and leading. Although most computers will not have the Goudy Modern typeface (which was handset in this case) as this edition, an instructor can approximate the type and reveal the program's flexibility and design capabilities.

Next, the wave is placed. Students are impressed to see the wave appear slowly on the screen. Finally, by using a grid or guidelines, the initial letter is placed. Then the entire design can be printed and a facsimile to the original design is created.

The Imitation Design

Farther along in the course, students may be assigned to create their own two-page layout or newsletter; this is an assignment which they sometimes struggle with but usually enjoy because of the responsibility and creativity. However, such an assignment may occur several weeks into the course. An early page layout project of having them recreate — make an exact replica of — a page or two of a newsletter or magazine spread designed with desktop publishing equipment demands that students not only learn the software but grasp the basics of different typefaces.

For this assignment, an instructor needs to prepare a hypothetical newsletter or two-page layout using the desktop publishing software. The reason to use specially created pages, rather than taken directly from another publication, is that the instructor will have more control over the assignment and can determine what sort of challenges to pose to the students. There are several good layouts on a variety of projects (newsletters, page designs, and brochures) in *Looking Good in Print*. This, along with the White book, are fine resources, or even textbooks, for demonstrating design basics as applied to desktop publishing.[6] For other ideas on simple designs using desktop publishing instructors and students may want to consult *Publish!* ; one very thorough article was, "The Newsletter Variations"(April 1988)."[7]

The assignment can be to replicate an absolutely porfect layout or recreate and improve on with flaws. When assigned, the students may be told exactly which typefaces, line sizes, etc. are used, which makes the project simpler. Another option is to give a selection of suggested sizes,

faces, etc., and then require students to determine what has been used. This option encourages students to differentiate among the graphic elements. In the project, students learn to imitate good design and to look carefully at other designs rather than relying solely on their own imagination.

On Plagiarism

The imitation assignment does, however, open up a different problem: the ability to plagiarize. The project creates an opportunity to talk about how designers watch and imitate others. But it is also an important to talk about plagiarism; this is an assignment in encouraging to learn a program, not to make copies of each other's computer files.

However, with computers, instructors have some new tools in determining plagiarism. For **any** computer assignment, instructors should require that students hand in both the hard copy (a printed version of the work) and the disk with the corresponding document. That way an instructor can examine both the print out and disk document for errors and discrepancies. If students hand in only a hard copy then the instructor can never be sure if the paper was simply printed out twice by someone else with just a change of the name. Reviewing the disk insures that the students will have to at least attempt something on his or her own. The disk document will also reveal some of the proper, and perhaps improper, steps the students are taking to obtain the results. Remedies to correct the mistakes early on can easily be made.

With most disks the instructor will also know the exact date and time the document was created; this can be one signal to discovering if two very similar projects are indeed copies. That is, the students have copied a document created on one disk onto another disk and then simply changed the name on the disk copy. Students will soon learn that it is easy to copy one another's documents. However, instructors will also learn that they have new, and different, ways of unearthing such problems. Because computers make plagiarizing so easy, it is important to be more savvy about the computer systems than the students.

The ability to easily copy another's work (or software) should compel instructors to include a plagiarism policy on their course outline. And it may provide a non-threatening opportunity to discuss the many aspects of copying another's work. Departments may want to consider the introduction of desktop publishing at their university as a time to review the plagiarism policy, just to make sure it handles the new angles that computers will pose.

Other problems and opportunities

A critical aspect of teaching desktop publishing is combining writing, editing and design. Students in advanced magazine or other journalism courses have probably already been introduced to writing and editing skills. Yet, in desktop publishing, graphic skills are as fundamental as verbal skills for any one using the system. And even though many magazine

editors feel that their younger audiences are reading less but are visually savvy, students still may not possess the ability to create the snazzy designs themselves. Consequently, instructors may want to teach graphic design basics *before* introducing a dtp system, rather than teaching them in tandem. Even so, problems arise immediately if students want learn even simple word processors, such as MacWrite, which incorporate type sizes, faces and styles. Spending a few sessions on graphics before introducing desktop publishing can ease the path into better design on computers.

The students who have most appreciated the desktop publishing advantages are usually those who come into a class understanding graphics. Even if students are introduced to design basics in a course using desktop publishing, they still are sometimes overwhelmed. Consequently, students may even be advised to take graphics or art courses for design fundamentals.

Still even when students are adept are all aspects of desktop publishing there is another obstacle which they sometimes face: jobs after college in which computers are not used and everything is still done "by hand." A Kansas State University student who just finished an ASME internship at *Glamour* told me that she and other students were lamenting how behind-the-times many big magazines are. "They just installed many of their computers," she reported and explained that she found it frustrating to see people on the staff in the art and editorial departments do things on paper which she had been doing for a few years on computers in class, on the award-winning K-State newspaper and in an internship connected with the university's extension services. Further research needs to be completed to determine how recent graduates' computer literacy intersects with actual computer use at major and smaller magazines.

Along side this problem is a general result of desktop publishing: the changes in the chain of command. In an article in *Academic Computing* , Thomas Smith at the University of Wisconsin, Madison, explained a typical dtp experience in which a variety of versions of a document are in several computers and many are working on the same document at once. "Who keeps track and controls them now — and how well?" he asked and then developed an elaborate control path.[8] In short: the traditional steps of production are blurred. Staff members see near perfect galleys much earlier and any of several staff members can correct them much later.

To demand that students follow the traditional patterns while using the new technology requires tremendous time and control on the instructor's part. In one magazine production class, I acted as the editor and production chief because the class was small and I wanted to monitor the result. But in the next class using desktop publishing, students coordinated their own editorial production schedule. They eagerly prepared beautiful, organized charts and instinctively saw the necessity of coordinating their jobs and following their own schedule. Their jobs easily intersected with one another because they had determined how the work would flow and knew that there might be overlaps. In the classroom, the breaking down of traditional duties allows

students more chance to try different publishing roles. It also leads to a greater importance of a production manager who must try to coordinate all the different versions. Consequently, the problem has become a new opportunity for learning.

New avenues of production

Desktop publishing equipment certainly opens up new avenues for production, design, even circulation. As Hewson notes whereas previously publishing was shaped and dictated by print production and its related expenses, desktop publishing provides a less expensive and still attractive technology.[9] There are many opportunities for students and faculty to rethink their work so that it communicates more effectively. Still, as White notes, "The fundamental truth: it is not the technology that matters, but the message. No matter how the message is produced or transmitted, it is its content that makes it useful and worthy."[10] The result is that journalism instruction must keep pace, and even in the forefront, of these demands so students are valuable and effective communicators.

CHAPTER I LOOMINGS

CALL ME ISHMAEL. Some years ago—never mind how long precisely—having little or no money in my purse, and nothing particular to interest me on shore, I thought I would sail about a little and see the watery part of the world. It is a way I have of driving off the spleen, and regulating the circulation. Whenever I find myself growing grim about the mouth; whenever it is a damp, drizzly November in my soul; whenever I find myself involuntarily pausing before coffin warehouses, and bringing up the rear of every funeral I meet; and especially whenever my hypos get such an upper hand of me, that it requires a strong moral principle to prevent me from deliberately stepping into the street, and methodically knocking people's hats off—then, I account it high time to get to sea as soon as I can. This is my substitute for pistol and ball. With a philosophical flourish Cato throws himself upon his sword; I quietly take to the ship. There is nothing surprising in this. If they but knew it, almost all men in their degree, some time or other, cherish very nearly the same feelings towards the ocean with me.

Footnotes

1. Kevin Rardin. *Desktop Publishing on the Mac*. New American Library: New York, 1986. p. 22.

2. "Mac makes newsweekly covers," Suzanne Weber. *MacWeek*. Vol 3. No. 13. p. 35.

3. David Hewson. *Introduction to Desktop Publishing*. Chronicle Books: San Francisco, 1988. p. 26.

4. Jan V. White. *Graphic Design for the Electronic Age*. Watson-Guptil Publications: New York, 1988. p.1

5. Herman Melville. *Moby-Dick, or, The Whale*. University of California Press: Berkeley, 1979. p. 2.

6. Roger C. Parker. *Looking Good in Print*. Ventana Press: Chapel Hill, NC, 1988. particularly pp. 91 -122.

7. _____. "The Newsletter Variations." *Publish!*. April 1988. pp. 52 - 63.

8. Thomas A.Smith. "Desktop Publishing in The University: Current Progress Future Visions," *Academic Computing*. May 1989. p. 26.

9. Hewson, p. 107.

10. White, p. ix.

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